

Arizona Department of Environmental Quality

1998 COST CEILINGS

Cost Ceiling Number	Unit Based or Task Based	Cost Ceiling Item	Unit of Measurement	Cost Ceiling Amount (1) (2)
1	UB	Professional Services Rates: Principal Level	\$/Hr	\$108
2	UB	Professional Services Rates: Senior Level	\$/Hr	\$93
3	UB	Professional Services Rates: Project Level	\$/Hr	\$79
4	UB	Professional Services Rates: Staff Level	\$/Hr	\$67
5	UB	Professional Services Rates: Field Level	\$/Hr	\$54
6	UB	Professional Services Rates: Technical Personnel (CADD, Computer, Map Production, etc.)	\$/Hr	\$49
7	UB	Assistant	\$/Hr	\$40
8	UB	Professional Services Rates: Word Processor (Computer Included)	\$/Hr	\$35
9	UB	Construction/Contracting Services Rates: Construction Field Supervisor	\$/Hr	\$58
10	UB	Labor	\$/Hr	\$40
11	UB	Unskilled Labor	\$/Hr	\$29
12	UB	Equipment Operator (Avg. Rate to Operate a Std. Piece of Equip)	\$/Hr	\$44
13	UB	Fieldwork Per Diem Without Overnight Stay	\$/Day	\$28
14	UB	Lodging)	\$/Day	\$89
15	UB	Per Diem Requirement (# Miles Required)	# Miles	60
16	UB	Consultant Mileage Rate	\$/Mile	\$0.45
17	UB	Contractor Mileage Rate	\$/Mile	\$0.55
18	UB	Consultant Cost: Mark-Up % on Subcontractor Work	% of Sub's Cost	16%
19	UB	Consultant Cost: Project Management - For All Site Work {SAF Pre-Approval Only SEE NOTE (3)}	% of Total Project Cost	10%
20	UB	Remedial Activities: Bulk Soil Excavation (Contaminated Soil) <=500 Tons	\$/Ton	\$6
21	UB	Remedial Activities: Bulk Soil Excavation (Contaminated Soil) >500 Tons	\$/Ton	\$4
22	UB	Remedial Activities: Bulk Soil Transportation (Includes Loading, and Hauling Distances Up to 250 Miles Round Trip), All Ton Sizes	\$/Ton	\$16
23	UB	Remedial Activities: Backfill (Labor; Hauling; Materials; Equipment; Compaction)	\$/Ton	\$16
24	UB	Remedial Activities: Landfill Disposal of Petroleum Contaminated Soil (PCS)	\$/Ton	\$34
25	UB	Remedial Activities: Thermal Remediation of PCS (Ex-Situ, On-Site, Portable Facility)	\$/Ton	\$38
26	UB	Remedial Activities: Thermal Remediation of PCS (Ex-Situ, Off-Site, Fixed Facility)	\$/Ton	\$26
27	UB	Remedial Activities: Bioremediation of PCS (Ex-Situ, Off-Site, Fixed Facility)	\$/Ton	\$32
28	UB	AZ/BLS-181 (Soil Only)	\$/Test	\$51
29	UB	Only)	\$/Test	\$52
30	UB	Only)	\$/Test	\$76
31	UB	Only)	\$/Test	\$76
32	UB	(modified) (Soil Only)	\$/Test	\$83
33	UB	Lab Analysis: TPH - Diesel Range by BLS-191 (Soil Only)	\$/Test	\$78
34	UB	Lab Analysis: TPH by Method 8015AZ (C6 - C32) (Soil Only)	\$/Test	\$73

35	UB	Lab Analysis: TPH by Method 8015AZ (C9 - C32) (Soil Only)	\$/Test	\$73
36	UB	Lab Analysis: TPH by Method 8015AZ (C6 - C32) (GW Only)	\$/Test	\$73
37	UB	Lab Analysis: TPH by Method 8015AZ (C9 - C32) (GW Only)	\$/Test	\$73
38	UB	Lab Analysis: TPH by EPA Method 8015 (modified)/BLS191 (Air Only)	\$/Test	\$72
39	UB	Lab Analysis: TPH/BTEX by EPA Method 8015 (modified)/8021 (Soil Only)	\$/Test	\$111
40	UB	Lab Analysis: TPH/BTEX by EPA Method 8015 (modified)/8021 (Air Only)	\$/Test	\$119
41	UB	Lab Analysis: Aromatic VOC's by EPA Method 8020 (Soil Only)	\$/Test	\$79
42	UB	Lab Analysis: Aromatic VOC's by EPA Method 8021 (Soil Only)	\$/Test	\$98
43	UB	Lab Analysis: Aromatic VOC's by EPA Method 8020 (Air Only)	\$/Test	\$101
44	UB	Lab Analysis: Aromatic VOC's by EPA Method 8021 (Air Only)	\$/Test	\$102
45	UB	Lab Analysis: Halogenated VOC's by EPA Method 8010 (Soil Only)	\$/Test	\$118
46	UB	Lab Analysis: Halogenated VOC's by EPA Method 8021 (Soil Only)	\$/Test	\$83
47	UB	Lab Analysis: Halogenated VOC's by EPA Method 8010 (Air Only)	\$/Test	\$155
48	UB	Lab Analysis: Halogenated VOC's by EPA Method 8021 (Air Only)	\$/Test	\$145
49	UB	Only)	\$/Test	\$124
50	UB	Lab Analysis: EPA 502.2 Target compounds including BTEX (GW Only)	\$/Test	\$184
51	UB	Lab Analysis: EPA 8021 Target compounds including BTEX (GW Only)	\$/Test	\$128
52	UB	Lab Analysis: EPA 524 Target compounds including BTEX (GW Only)	\$/Test	\$206
53	UB	Lab Analysis: EPA 8260 Target compounds including BTEX (GW Only)	\$/Test	\$191
54	UB	Only)	\$/Test	\$107
55	UB	Only)	\$/Test	\$82
56	UB	Only)	\$/Test	\$76
57	UB	Only)	\$/Test	\$38
58	UB	Lab Analysis: Purgeable Halocarbons by EPA Method 601 (GW Only)	\$/Test	\$103
59	UB	Lab Analysis: Halogenated VOC's by EPA Method 8021 (GW Only)	\$/Test	\$121
60	UB	Lab Analysis: Purgeable Halocarbons by EPA Method 602 (GW Only)	\$/Test	\$85
61	UB	Lab Analysis: Aromatic Target List by EPA Method 8021 (GW Only)	\$/Test	\$120
62	UB	Lab Analysis: EPA Method 601/602 (GW Only)	\$/Test	\$150
63	UB	Lab Analysis: Full List Volatile Organics by EPA Method 8021 (GW Only)	\$/Test	\$132
64	UB	Lab Analysis: Full List Volatile Organics by EPA Method 8021 (Soil Only)	\$/Test	\$136
65	UB	Only)	\$/Test	\$182
66	UB	Only)	\$/Test	\$211
67	UB	Lab Analysis: Semi-Volatile Organics by EPA Method 8270 (Soil Only)	\$/Test	\$342
68	UB	Lab Analysis: Semi-Volatile Organics by EPA Method 8270 (GW Only)	\$/Test	\$340
69	UB	Only)	\$/Test	\$250
70	UB	Only)	\$/Test	\$250

71	UB	Lab Analysis: Igniteability Test by EPA Method 1010 (Liquid Only)	\$/Test	\$44
72	UB	Lab Analysis: Igniteability Test by EPA Method 1010 (Soil Only)	\$/Test	\$38
73	UB	Lab Analysis: Corrosivity pH by EPA Method 9045 (Soil Only)	\$/Test	\$20
74	UB	9045 (GW Only)	\$/Test	\$13
75	UB	Method 9095	\$/Test	\$16
76	UB	Lab Analysis: Phosphate-P by Waste Water Method 365 (modified) (Soil Only)	\$/Test	\$32
77	UB	Lab Analysis: Nitrate+nitrite-N by Waste Water Method 353 (modified) (Soil Only)	\$/Test	\$42
78	UB	Lab Analysis: On-Site Mobile Lab Rate for One Person Crew - Soil & GW (Half Day Rate)	\$/Half Day	\$756
79	UB	Lab Analysis: On-Site Mobile Lab Rate for Two Person Crew - Soil & GW (Half Day Rate)	\$/Half Day	\$964
80	UB	Lab Analysis: On-Site Mobile Lab Rate for One Person Crew - Soil & GW (Daily Rate)	\$/Day	\$1,410
81	UB	Lab Analysis: On-Site Mobile Lab Rate for Two Person Crew - Soil & GW (Daily Rate)	\$/Day	\$1,583
82	UB	Equipment Rental: Decon Equipment (Buckets/Brushes/Detergent)	\$/Day	\$13
83	UB	Equipment Rental: Hand Auger Sampling Kit (Hand Auger/Brass Sleeves)	\$/Day	\$37
84	UB	Equipment Rental: Slide Hammer Core Sampler	\$/Day	\$35
85	UB	Equipment Rental: Photoionization Detector	\$/Day	\$89
86	UB	Equipment Rental: Flame Ionization Detector	\$/Day	\$103
87	UB	Equipment Rental: LEL/O2 Meter	\$/Day	\$49
88	UB	Equipment Rental: pH and Conductivity Meter	\$/Day	\$29
89	UB	Equipment Rental: Dissolved Oxygen Meter	\$/Day	\$32
90	UB	Submersible Pump	\$/Day	\$115
91	UB	Submersible Pump	\$/Day	\$94
92	UB	Equipment Rental: Tedlar Bag Sampler	\$/Day	\$24
93	UB	Equipment Rental: Portable VES Pilot Test Unit	\$/Day	\$391
94	UB	<=5kW	\$/Day	\$47
95	UB	5kW<Generator <=10kW	\$/Day	\$89
96	UB	Washer	\$/Day	\$104
97	UB	Equipment Rental: Water Level Indicator	\$/Day	\$24
98	UB	Equipment Rental: Oil/Water Interface Probe	\$/Day	\$54
99	UB	Equipment Rental: Contractor Heavy Duty Service Truck (includes tools and equipment)	\$/Day	\$83
100	UB	Equipment Rental: Bailer Rental	\$/Day	\$13
101	UB	Equipment Rental: Anemometer	\$/Day	\$34
102	UB	Equipment Rental: Carbon Dioxide Meter	\$/Day	\$25
103	UB	Equipment Rental: VES System with Thermal Oxidizer (100 cfm)	\$/Month	\$2,224
104	UB	Equipment Rental: VES System with Thermal Oxidizer (250 cfm)	\$/Month	\$2,871
105	UB	Equipment Rental: VES System with Thermal Oxidizer (500 cfm)	\$/Month	\$3,391
106	UB	Equipment Rental: VES System with Thermal Oxidizer (750 cfm)	\$/Month	\$3,884
107	UB	Equipment Rental: VES System with Catalytic Oxidizer (100 cfm)	\$/Month	\$2,317
108	UB	Equipment Rental: VES System with Catalytic Oxidizer (250 cfm)	\$/Month	\$3,456
109	UB	Equipment Rental: VES System with Catalytic Oxidizer (500 cfm)	\$/Month	\$3,544
110	UB	Equipment Rental: Air Sparge System (up to 100 cfm and up to 12 psi)	\$/Month	\$250

111	UB	Equipment Rental: Air Sparge System (up to 100 cfm and 13-100 psi)	\$/Month	\$1,271
112	UB	CFM	\$/Month	\$367
113	UB	CFM	\$/Month	\$520
114	UB	Equipment Cost: Disposable Bailers	\$/Bailer	\$10
115	UB	Equipment Cost: 55 Gallon Drum (new)	\$/Drum	\$51
116	UB	Equipment Cost: 55 Gallon Drum (reconditioned)	\$/Drum	\$39
117	TB	14-Day Letter	\$/Report	\$259
118	TB	Initial Health and Safety Plan	\$/Report	\$423
119	TB	Subsequent Health and Safety Plan	\$/Report	\$206
120	TB	Approved Work Plan for Initial Site Characterization (SAF Pre-Approval Only)	\$/Report	\$1,947
121	TB	Approved Site Characterization Work Plan Scenario 1: Soil Only	\$/Report	\$2,721
122	TB	Approved Site Characterization Work Plan Addendum Scenario 1: Soil Only	\$/Report	\$1,047
123	TB	Approved Site Characterization Work Plan Scenario 2: Soil & GW	\$/Report	\$3,565
124	TB	Approved Site Characterization Work Plan Addendum Scenario 2: Soil & GW	\$/Report	\$1,325
125	TB	Contractor Cost: Soil Boring and Sampling, Hollow Stem Auger, <100 Feet	\$/Foot	\$17
126	TB	Contractor Cost: Soil Boring and Sampling, Hollow Stem Auger, >=100 Feet	\$/Foot	\$21
127	TB	Contractor Cost: Soil Boring and Sampling, Limited Access Drilling for Hollow-Stem Auger, <100 Feet	\$/Foot	\$18
128	TB	Contractor Cost: Soil Boring and Sampling, Limited Access Drilling for Hollow-Stem Auger, >=100 Feet	\$/Foot	\$22
129	TB	Contractor Cost: Soil Boring and Sampling, Air Rotary Rig, <100 Feet	\$/Foot	\$32
130	TB	Contractor Cost: Soil Boring and Sampling, Air Rotary Rig, >=100 Feet	\$/Foot	\$33
131	TB	Contractor Cost: Soil Boring and Sampling, Rotosonic Rig, <100 Feet	\$/Foot	\$33
132	TB	Contractor Cost: Soil Boring and Sampling, Rotosonic Rig, >=100 Feet	\$/Foot	\$38
133	TB	Contractor Cost: Soil Boring and Sampling, Dual Wall Percussion Rig, <100 Feet	\$/Foot	\$36
134	TB	Contractor Cost: Soil Boring and Sampling, Dual Wall Percussion Rig, >=100 Feet	\$/Foot	\$40
135	TB	Contractor Cost: Soil Boring and Sampling Make Ready/Preparation Cost: Hollow-Stem Auger	\$/Event	\$287
136	TB	Contractor Cost: Soil Boring and Sampling Make Ready/Preparation Cost: ALL OTHER RIGS	\$/Event	\$463
137	TB	Contractor Cost: Soil Boring and Sampling Mob/Demob/Travel Cost: Hollow-Stem Auger	\$/Mile	\$3
138	TB	Contractor Cost: Soil Boring and Sampling Mob/Demob/Travel Cost: ALL OTHER RIGS	\$/Mile	\$4
139	TB	Contractor Standby Rate, Hollow Stem Auger	\$/Hour	\$148
140	TB	Contractor Standby Rate, ALL OTHER RIGS	\$/Hour	\$189
141	TB	Replacement	\$/Boring	\$52
142	TB	Contractor Cost: Concrete Replacement	\$/S.F.	\$13
143	TB	Replacement	\$/Boring	\$43
144	TB	Contractor Cost: Asphalt Replacement	\$/S.F.	\$11
145	TB	Cost	\$/Hour	\$127
146	TB	Cost	\$/Hour	\$80

147	TB	Contractor Cost: Professional Survey of Groundwater Monitor Wells	\$/Well	\$201
148	TB	Rate)	\$/Day	\$2,893
149	TB	Day Rate)	\$/Half Day	\$1,808
150	TB	Sampling	\$/Sample	\$103
151	TB	Contractor Cost: Hydropunch Groundwater Sample Collection From Soil Boring (Half Day Rate)	\$/Half Day	\$1,130
152	TB	Contractor Cost: Hydropunch Groundwater Sample Collection From Soil Boring (Daily Rate)	\$/Day	\$1,880
153	TB	Contractor Cost: Hydropunch Groundwater Sample Collection (Half Day Rate)	\$/Half Day	\$843
154	TB	Contractor Cost: Hydropunch Groundwater Sample Collection (Daily Rate)	\$/Day	\$1,545
155	TB	Soil Boring Abandonment By Grout: Contractor Cost, Boring Diameter <8"	\$/Foot	\$7
156	TB	Soil Boring Abandonment By Grout: Contractor Cost, Boring Diameter 8" to 10"	\$/Foot	\$8
157	TB	Soil Boring Abandonment By Grout: Contractor Cost, Boring Diameter >=10"	\$/Foot	\$8
158	TB	<100 Feet	\$/Foot	\$33
159	TB	>=100 Feet	\$/Foot	\$34
160	TB	Feet	\$/Foot	\$52
161	TB	Feet	\$/Foot	\$60
162	TB	Feet	\$/Foot	\$52
163	TB	Feet	\$/Foot	\$60
164	TB	Rig, <100 Feet	\$/Foot	\$52
165	TB	Rig, >=100 Feet	\$/Foot	\$60
166	TB	<100 Feet	\$/Foot	\$38
167	TB	>=100 Feet	\$/Foot	\$39
168	TB	Feet	\$/Foot	\$57
169	TB	Feet	\$/Foot	\$65
170	TB	Feet	\$/Foot	\$57
171	TB	Feet	\$/Foot	\$65
172	TB	Rig, <100 Feet	\$/Foot	\$57
173	TB	Rig, >=100 Feet	\$/Foot	\$65
174	TB	<100 Feet	\$/Foot	\$56
175	TB	>=100 Feet	\$/Foot	\$57
176	TB	Feet	\$/Foot	\$75
177	TB	Feet	\$/Foot	\$83
178	TB	Feet	\$/Foot	\$75
179	TB	Feet	\$/Foot	\$83
180	TB	Rig, <100 Feet	\$/Foot	\$75
181	TB	Rig, >=100 Feet	\$/Foot	\$83
182	TB	Surface Well Completion Contractor Cost Scenario 1: Access Manhole <=12"	\$/Well	\$216
183	TB	Surface Well Completion Contractor Cost Scenario 2: Access Manhole >12" to <=24"	\$/Well	\$342
184	TB	Well Development Contractor Cost Scenario 1: 2" Well Development Cost, <100 Feet	\$/Well	\$258
185	TB	Well Development Contractor Cost Scenario 1: 2" Well Development Cost, >=100 Feet	\$/Well	\$299
186	TB	Well Development Contractor Cost Scenario 2: 4" Well Development Cost, <100 Feet	\$/Well	\$262
187	TB	Well Development Contractor Cost Scenario 2: 4" Well Development Cost, >=100 Feet	\$/Well	\$328
188	TB	Well Development Contractor Cost Scenario 3: 6" Well Development Cost, <100 Feet	\$/Well	\$290
189	TB	Well Development Contractor Cost Scenario 3: 6" Well Development Cost, >=100 Feet	\$/Well	\$343
190	TB	Remedial Well Abandonment by Grouting, Well <=2"	\$/Foot	\$7

191	TB	Remedial Well Abandonment by Grouting, Well >2" to <=4"	\$/Foot	\$9
192	TB	>4"	\$/Foot	\$12
193	TB	Ready/Preparation Cost	\$/Event	\$101
194	TB	Mob/Demob/Travel Cost	\$/Mile	\$1.33
195	TB	Well Abandonment By Drill Out (From ground surface down to a depth of 20')	\$/Well	\$275
196	TB	Interim Status Report	\$/Report	\$1,418
197	TB	Site Characterization Report Consultant Cost Scenario 1: Up To 7 Borings	\$/Report	\$3,602
198	TB	Site Characterization Report Consultant Cost Scenario 2: Up To 5 Wells	\$/Report	\$4,405
199	TB	Site Characterization Report Consultant Cost Scenario 3: Up to 7 Borings and 5 Wells	\$/Report	\$5,063
200	TB	Pilot Testing: Soil Vapor Extraction (SVE)	\$/Event	\$3,380
201	TB	Pilot Testing: SVE/Air Sparge	\$/Event	\$4,401
202	TB	Pilot Testing: Bioventing/Respiration	\$/Event	\$3,167
203	TB	Approved Corrective Action Plan (CAP)	\$/Report	\$5,842
204	TB	SAF Work Plan for In-Situ & Ex-Situ Soil Remediation (SAF Pre-Approval Only)	\$/Report	\$3,435
205	TB	Consultant Preparation of SAF Work Plan to Implement Approved CAP	\$/Report	\$2,436
206	TB	Scenario 1: 2" Well<100 Feet (Compliance Sampling Methodology)--PURGING IS REQUIRED	\$/Well	\$234
207	TB	Scenario 1: 2" Well<100 Feet (Investigative Sampling Methodology)--PURGING IS NOT REQUIRED	\$/Well	\$116
208	TB	Scenario 1: 2" Well>=100 Feet (Compliance Sampling Methodology)--PURGING IS REQUIRED	\$/Well	\$310
209	TB	Scenario 1: 2" Well>=100 Feet (Investigative Sampling Methodology)--PURGING IS NOT REQUIRED	\$/Well	\$154
210	TB	Scenario 2: 4" Well<100 Feet (Compliance Sampling Methodology)--PURGING IS REQUIRED	\$/Well	\$310
211	TB	Scenario 2: 4" Well<100 Feet (Investigative Sampling Methodology)--PURGING IS NOT REQUIRED	\$/Well	\$148
212	TB	Scenario 2: 4" Well>=100 Feet (Compliance Sampling Methodology)--PURGING IS REQUIRED	\$/Well	\$372
213	TB	Scenario 2: 4" Well>=100 Feet (Investigative Sampling Methodology)--PURGING IS NOT REQUIRED	\$/Well	\$220
214	TB	Scenario 3: 6" Well<100 Feet (Compliance Sampling Methodology)--PURGING IS REQUIRED	\$/Well	\$354
215	TB	Scenario 3: 6" Well<100 Feet (Investigative Sampling Methodology)--PURGING IS NOT REQUIRED	\$/Well	\$213
216	TB	Scenario 3: 6" Well>=100 Feet (Compliance Sampling Methodology)--PURGING IS REQUIRED	\$/Well	\$411
217	TB	Scenario 3: 6" Well>=100 Feet (Investigative Sampling Methodology)--PURGING IS NOT REQUIRED	\$/Well	\$244
218	TB	Monitoring	\$/Well	\$63
219	TB	Consultant Cost for Drilling and Site Characterization Activities: Make Ready/Preparation Cost	\$/Event	\$255

220	TB	Remedial Activities: Make Ready/Preparation Cost	\$/Event	\$173
221	TB	Liquid produced during well development and purging events	\$/Gallon	\$2.35
222	TB	Scenario 1: Up Through 5 Wells (Covers first sampling event)	\$/Report	\$1,687
223	TB	Scenario 2: >5 Wells (Covers first sampling event)	\$/Report	\$1,894
224	TB	Scenario 1: Up Through 5 Wells (Covers subsequent sampling events)	\$/Report	\$939
225	TB	Scenario 2: >5 Wells (Covers subsequent sampling events)	\$/Report	\$1,048
226	TB	Reimbursement Application, Scenario 1: <= 10 Primary (Main Provider) Invoices	\$/App	\$609
227	TB	Reimbursement Application, Scenario 2: 10<Primary (Main Provider) Invoices<=20	\$/App	\$862
228	TB	Reimbursement Application, Scenario 3: >20 Primary (Main Provider) Invoices	\$/App	\$1,239
229	TB	SAF Application Preparation Cost: Direct Pay Application	\$/App	\$486
230	TB	SAF Application Preparation Cost: Pre-Approval Application	\$/App	\$485
Notes: which do not have published Mark-up allowable Management Cost Ceiling amount will				
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